



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,259	12/04/2003	David S. Keppel	2878	7800

50855 7590 07/31/2006

UNITED STATES SURGICAL,  
A DIVISION OF TYCO HEALTHCARE GROUP LP  
195 MCDERMOTT ROAD  
NORTH HAVEN, CT 06473

EXAMINER
----------

PEFFLEY, MICHAEL F

ART UNIT	PAPER NUMBER
----------	--------------

3739

DATE MAILED: 07/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/728,259		KEPPEL, DAVID S.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Michael Peffley		3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/3</u> . | 6) <input type="checkbox"/> Other: _____  |

Applicant's amendments and comments, received February 17, 2006, have been fully considered by the examiner now of record. The following is a complete response to the February 17, 2006 communication.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Information Disclosure Statement***

It is noted that applicant has filed an IDS on May 3, 2006. This IDS, as reflected in Office records, includes 3 pages of PTO-1449 numbered 2 through 4 (there is no page labeled "Sheet 1 of 4" as would be expected). It is further noted that the Office reflects that 3 references have been included with the filing of May 3, 2006. Many of the references cited on the May 3, 2006 IDS have been cited on earlier IDS's and may have been considered by the examiner previously of record. The examiner currently of record has considered only those references for which Office records reflect a copy of the reference and a translation or brief description of the reference (if in a foreign language). The examiner has gone through all the prior art shown to be received by the Office in all Information Disclosure Statements. Each of the citations on the May 3, 2006 that have been lined through have not been considered because there is no translation found in the prior art recorded in the Office documents. Those citations for which no copy is reflected in the Office records have been lined through with the indication "no copy" in the margin. Should applicant wish to have the line-through references considered, a copy of each reference as well as a translation and/or a concise explanation of the relevance (if in a foreign language) must be submitted. If

these references and/or translations have been previously submitted and mishandled by the Office, applicant must provide a post-card receipt clearly indicating that said documents have been received by the Office and is respectfully requested to provide another copy of the reference and/or translation so that the examiner currently of record may review the prior art.

***Claim Rejections - 35 USC § 102***

Claims 1-3, 6-8, 10-12, 15-17 and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Gines (6,033,399).

Gines discloses an electrosurgical generator that changes the output power of the generator based on sensed impedance (last line of the Abstract). In particular, impedance is measured using the output voltage and the output current of the waveform (see col. 9, lines 60-65) by a processing unit (12) which sends a signal to the waveform generator (12) to control the waveform being sent to tissue. It is noted that Gines disclose changing output power by changing the output voltage, and changing output voltage would inherently change the crest factor of the waveform. Hence, Gines is changing the output crest factor and output power based on the control signal from the impedance measurement processor. Gines specifically go on to state that the output power may be changed by changing the duty cycle or the crest factor of the output signal (col. 6, lines 40-50). The microprocessor (12) is deemed to be a data structure that includes data for setting the output power (or ceasing output power) based on measured impedance. The controller takes data samples in real time to determine

tissue impedance and immediately send a control signal to change the output of the generator.

***Claim Rejections - 35 USC § 103***

Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gines ('399) in view of the teaching of Carder (4,961,047).

The Gines system has been previously addressed. Gines specifically teaches of altering the output power of a generator based on sensed impedance, but fails to specifically teach using a look-up table as the means to correspond a measured impedance value with a generator output power. Gines also fail to disclose the specific formulas for determining the output crest factor based on duty cycle, although Gines does teach that the crest factor may be controlled by changing the duty cycle.

Carder discloses an electrosurgical generator that measures impedance and controls the output power of the generator in response to these measurements. In particular, Carder teach that it is known to use a look-up table associated with a processor to determine measure impedance based on sensed current and voltage, and to further use a look up table to determine a corresponding power output based on the impedance (see Abstract). To have employed a look-up table in the Gines microprocessor for assigning output values to measured impedances would have been an obvious consideration for one of ordinary skill in the art since Carder teaches that it is generally known to determine power outputs using look-up tables.

Claims 5, 9, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gines ('399) in view of the teaching of Belt et al (4,191,188).

Gines also fail to disclose the specific formulas for determining the output crest factor based on duty cycle, although Gines does teach that the crest factor may be controlled by changing the duty cycle.

Belt et al disclose a system that alters the crest factor by changing the duty cycle. The examiner maintains that any reasonable formula for arriving at the crest factor using an algorithm involving the duty cycle would be within the purview of the skilled artisan. It is noted that applicant's specification fails to provide any particular criticality or unexpected result associated with the formula set forth in claims 5 and 14. Belt et al also disclose a means to manually adjust the crest factor of the system (see col. 5, lines 29-36).

To have provided the Gines system with any reasonable formula for arriving at the crest factor based on the duty cycle of the generator would have been an obvious consideration for one of ordinary skill in the art in view of the teaching of Belt et al. To have further provide a manual control to set the crest factor would have been an obvious modification in view of the teaching of Belt et al.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

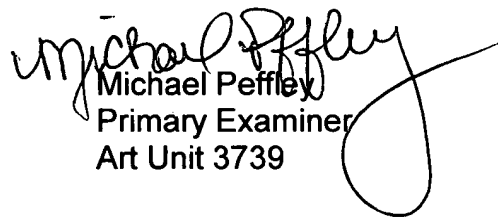
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Peffley whose telephone number is (571) 272-4770. The examiner can normally be reached on Mon-Fri from 6am-3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Michael Peffley  
Primary Examiner  
Art Unit 3739

mp  
July 1, 2006